

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
6 May 2005 (06.05.2005)

PCT

(10) International Publication Number
WO 2005/041458 A1

(51) International Patent Classification⁷: H04J 11/00, 9/00, 1/00, H04B 7/208, H04L 5/04

(74) Agents: TRIPOLI, Joseph, S. et al.; c/o Thomson Licensing Inc., Two Independence Way, Suite #200, Princeton, NJ 08540 (US).

(21) International Application Number:

PCT/US2003/029910

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date:

25 September 2003 (25.09.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(71) Applicant (*for all designated States except US*): THOMSON LICENSING S.A. [FR/FR]; 46, Quai A. Le Gallo, F-92648 Boulogne (FR).

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(72) Inventor; and

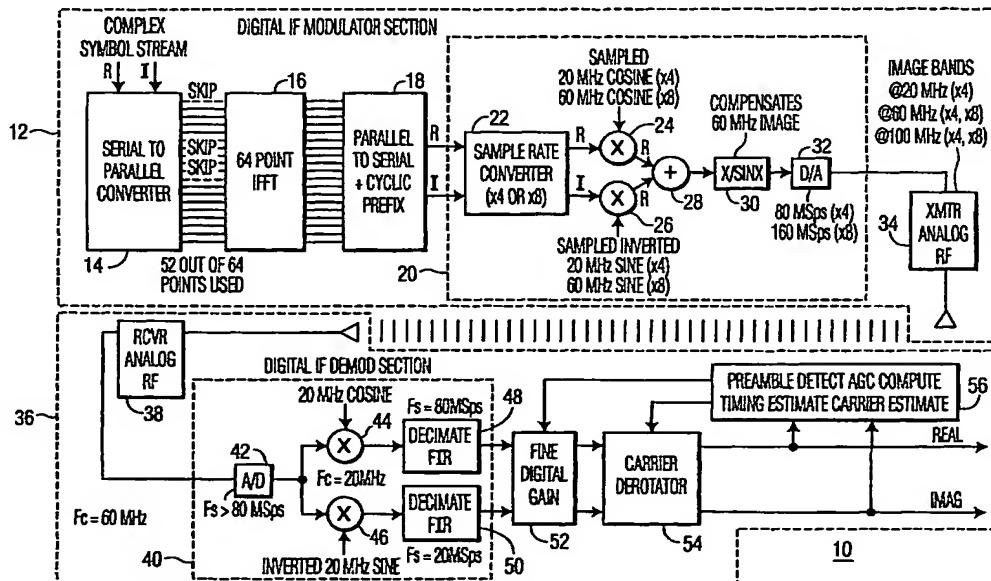
(75) Inventor/Applicant (*for US only*): MCNEELY, David, Lowell [US/US]; 7832 Warbler Court, Indianapolis, IN 46256 (US).

Published:

— with international search report

[Continued on next page]

(54) Title: ORTHOGONAL FREQUENCY DIVISION MULTIPLEXING (OFDM) DIGITAL RADIO FREQUENCY (RF) TRANSCEIVER



(57) Abstract: A digital radio frequency (RF) transceiver circuit (100) comprises circuitry (110, 112, 114, 116) that is adapted to select between a transmitter input signal (148) and a receiver input signal (43). A plurality of filters (126, 128, 130, 132) are adapted to receive either the transmitter input signal (148) or the receiver input signal (43) and to produce either a filtered transmitter signal or a filtered receiver signal. Circuitry (138, 140, 142) alternatively receives the filtered transmitter signal or the filtered receiver signal and produces a modulated output and a demodulated output.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.